

EXEMPLAR PROBLEMS IN BIOLOGY - CLASS XI

(Corrections in the questions)

Chapter 1

The Living World

Multiple Choice Questions

3. The term 'systematics' refer to:

- a. Identification and study of organ systems
- b. Identification and preservation of plants and animals
- c. Diversity of kinds of organisms and their relationship
- d. Study of habitats of organisms and their classification

Chapter 2

Biological Classification

Multiple Choice Questions

8. Associations between Mycobiont and Phycobiont are found in

Chapter 3

Plant Kingdom

Multiple Choice Questions

2. Fusion of two motile gametes which are dissimilar in size is termed as

Chapter 4

Animal Kingdom

Multiple Choice Questions

1. In some animal groups, the body is found divided into compartments with serial repetition of at least some organs. This characteristic feature is called
2. Given below are types of cells present in some animals. Which of the following cells can differentiate to perform different functions?
5.
 - b. Pneumatic bones
 - d. Warm blooded
7.
 - b. *Asterias* exhibits radial symmetry
13. Column B
 - i. Canal system
 - ii. Water-vascular system
 - iii. Muscular pharynx
 - iv. Jointed appendages
 - v. Metameres

Chapter 5

Morphology of Flowering Plants

Multiple Choice Questions

6.
a. Coconut

Chapter 6

Anatomy of Flowering Plants

Multiple Choice Questions

4. Identify the simple tissue from among the following -
14. In conifers, fibres are likely to be absent in

Chapter 7

Structural Organisation in Animals

Multiple Choice Questions

4. Delete the question
5. Setae help in locomotion in earthworm but are not uniformly present in all the segments. They are present in

Chapter 8

Cell: The Unit of Life

Multiple Choice Questions

4. Which of the following stains is not used for staining chromosomes?
- a. Basic Fuchsin
 - b. Safranin
 - c. Methylene green
 - d. Carmine

Ans:- b. Safranin

5. Options:
- a. i, iv, iii, ii
 - b. i, iii, iv, ii
 - c. ii, i, iii, iv
 - d. iii, ii, i, iv
6. Which of the following features is common to prokaryotes and many eukaryotes?
- a. Chromatin material present
 - b. Cell wall present
 - c. Nuclear membrane present
 - d. Membrane-bound sub-cellular organelles present
- 10.
- a. Cell wall is made up of peptidoglycans

- 12.
- c. Presence of thylakoids

Chapter 9

Biomolecules

Multiple Choice Questions

3. Aminoacids have both an amino group and a carboxyl group in their structure. Which amongst the following is an amino acid?
- a. Formic acid
 - b. Glycerol
 - c. Glycolic acid
 - d. Glycine
4. An aminoacid under certain conditions have both positive and negative charges simultaneously in the same molecule. Such a form of aminoacid is called
- a. Acidic form
 - b. Basic form
 - c. Aromatic form
 - d. Zwitterionic form
5. Which os the following sugars have the same number of carbon as present in glucose?
6. An acid soluble compound formed by phosphorylation of nucleoside is called
9. A homopolymer has only one type of building block called monomer repeated 'n' number of times. A heteropolymer has more than one type of monomer. Proteins are heteropolymers usually made of
- c. 30 types of monomers
13. The primary structure of a protein molecule has
14. Which of the following reactions is not enzyme-mediated in biological system?

Chapter 10

Cell Cycle and Cell Division

Multiple Choice Questions

1. Meiosis in diploid organisms results in
- 5.
- d. Pairing of homologous chromosomes

Chapter 11

Transport in Plants

Multiple Choice Questions

- 7.
- a. accumulated
 - b. bound to cell wall

11.

Options:

- a. A-ii, B-iv, C-v, D-i, E-iii
- b. A-iii, B-ii, C-iv, D-i, E-v
- c. A-i, B-ii, C-iii, D-ii, E-v
- d. A-v, B-iv, C-iii, D-ii, E-i

12. Mark the mismatched pair.

- a. Amyloplast : store protein granule
- b. Elaioplast : store oils or fats
- c. Chloroplasts : contain chlorophyll pigments
- d. Chromoplasts : contain coloured pigments other than chlorophyll

Chapter 12

Mineral Nutrition

Multiple Choice Questions

2.

- b. essential element concentration below which plant growth becomes enhanced.

Chapter 13

Photosynthesis in Higher Plants

Multiple Choice Questions

4. Which light range is least effective in photosynthesis?

Chapter 14

Respiration in Plants

Multiple Choice Questions

6. Delete the question

Chapter 15

Plant Growth and Development

Multiple Choice Questions

2. Coconut water contains

8.

- b. Plant development is dependent on the environment

Chapter 16

Digestion and Absorption

Multiple Choice Questions

9.

- d. Secretion of hormone called gastrin

10.

- c. Enterokinase is secreted by pancreas

Chapter 17

Breathing and Exchange of Gases

Multiple Choice Questions

1. Respiration in insects is called direct because
 - a. The cells exchange O_2 / CO_2 directly with the air in the tubes
2. Which of the following does not occur during breathing?
 - b. Brings the air to body temperature
4.
 - d. It increases O_2 transport
8.
 - d. Diaphragm and intercostal muscles
13. From the following relationships between respiratory volume and capacities, mark the correct option

Chapter 18

Body Fluids and Circulation

Multiple Choice Questions

1. Which of the following cells does not exhibit phagocytic activity?
7. Which one of the following types of cells lack nucleus in humans?
 - d. Erythrocytes
10. Agranulocytes responsible for immune response of the body are

Chapter 19

Excretory Products and their Elimination

Multiple Choice Questions

3. Which of the following statements is correct?
6.
 - a. D-i, C-ii, B-iii, A-iv
 - b. B-i, D-ii, A-iii, C-iv
 - c. D-i, C-ii, A-iii, B-iv
 - d. B-i, C-ii, A-iii, D-iv

Chapter 20

Locomotion and Movement

Multiple Choice Questions

7. Which one of the following pairs is incorrect?
 - a. Hinge joint : between humerus and pectoral girdle
 - b. Pivot joint : between atlas and axis
 - c. Gliding joint : between the carpals
 - d. Saddle joint : between carpals metacarpals of thumb

Chapter 22

Chemical Coordination and Integration

Multiple Choice Questions

2. Which of the following hormones is not secreted by anterior pituitary?
5. c. Differentiation of T lymphocytes
11. Hormones are called chemical signals that stimulate specific target tissues. Which is the correct location of these receptors in case of protein hormones?
12. Choose the correct option among the following
- | Column A | Column B |
|------------------------------|----------------------------------|
| A. Epinephrine | i. Stimulates muscle growth |
| B. Testosterone | ii. Decrease in blood pressure |
| C. Glucagon | iii. Breakdown of liver glycogen |
| D. Atrial natriuretic Factor | iv. Increases heart beat |
- Options:
- a. A-ii, B-i, C-iii, C-iv
- b. A-iv, B-i, C-iii, D-ii
- c. A-i, B-ii, C-iii, D-iv
- d. A-i, B-iv, C-ii, D-iii
13. Which of the following do not play any role in calcium balance in the human body?
14. Which of the following organs in mammals does not consist of a central 'medullary' region surrounded by a cortical region?
15. Which of the following conditions is not linked to deficiency of thyroid hormone?
- d. Exophthalmia

Chapter 23

Answers to Multiple Choice Questions

(Corrections in the answers)

Chapter 1: The Living World

8-b

Chapter 3: Plant Kingdom

1-c

Chapter 4: Animal Kingdom

4-b; 7-c

Chapter 5: Morphology of Flowering Plants

8-b

Chapter 6: Anatomy in Flowering Plants

8-c; 14-b; 17-c

Chapter 8: Cell: The Unit of Life

1-d; 4-b

Chapter 9: Biomolecules

3-d; 14-a

Chapter 10: Cell Cycle and Cell Division

2-b; 5-b

Chapter 11: Transport in Plants

1-d; 7-c 11-a

Chapter 12: Mineral Nutrition

2-b 4-d; 8-d

Chapter 13: Photosynthesis in Higher Plants

4-d

Chapter 14: Respiration in Plants

4-c

Chapter 17: Breathing and Exchange of Gases

1-a; 2-c; 4-b; 6-c; 7-a; 8-c; 14-a

Chapter 18: Body Fluid and Circulation

2-c; 10-d; 16-d

Chapter 19: Excretory Products and their Elimination

3-b; 14-b; 15-c

Chapter 20: Locomotion and Movement

4-c

Chapter 21: Neural Control and Co-ordination

11-d

Chapter 22: Chemical Coordination and Integration

14-c